

Listing and Amendments to the Claims

1. (original) A media area network comprising:
 - a storage system including at least one storage device for storing digitized information;
 - a host system for providing overall control of the media area network; and
 - a host bus adapter for providing a link between the host system and the storage system, the host bus adapter having a lower-level port driver that includes:
 - means for monitoring communications between the storage system and the host bus adapter through an active port, and
 - means for switching to an alternative port in real time, thereby achieving fail-over recovery in the event of a communications failure.
2. (original) The media area network according to claim 1 wherein the monitoring means further comprises means for determining whether the storage system successfully completed at least one command.
3. (original) The media area network according to claim 2 wherein the monitoring means further comprises means for determining whether unsuccessful completion of the at least one command can be corrected by fail-over recovery.
4. (original) The media area network according to claim 3 wherein the switching means further comprises means for scheduling fail-over recovery upon determination that unsuccessful completion of the at least one command can be corrected by fail-over recovery.
5. (original) The media area network according to claim 4 wherein the means for scheduling fail-over recovery further comprises:
 - means for queuing requests from an original port that failed to an alternative port;
 - means for canceling all outstanding requests on the original port; and
 - means for issuing at least one command via the alternate port.
6. (original) A method for achieving fail-over recovery in a media area network having a storage system with at least one storage device for storing digitized

information, a host system for providing overall control of the media area network; and a host bus adapter for providing a link between the host system and the storage system, the method comprising the steps of

monitoring, at a lower-level port driver in the host bus adapter, communication status between the storage system and the host bus adapter, and in the event of a failure;

initiating switching at the lower-level port driver to activate an alternative port, thereby achieving fail-over recovery.

7. (original) The method according to claim 6 wherein the step of monitoring the communication status between the storage system and the host bus adapter further comprises the step of determining whether the storage system successfully completed at least one command.

8. (original) The method according to claim 7 further comprising the step of determining whether unsuccessful completion of the at least one command can be corrected by fail-over recovery.

9. (original) The method according to claim 8 further comprising the step of scheduling fail-over recovery upon a determination that unsuccessful completion of the at least one command can be corrected by fail-over recovery.

10. (original) The method according to claim 9 further comprising the steps of: queuing requests from an original port that failed to an alternative port; canceling all outstanding requests on the original port; and issuing at least one command via the alternate port.

11. (original) The method according to claim 10 further comprising the step of checking whether cancellation of the outstanding commands occurred, and if not then initiating fail-over recovery of any failed storage system controller.